**Method and Apparatus for Selectively Releasing Personal Contact Information
Stored in An Electronic or Telephonic Database**

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Background of the Invention

Many people would like to list their e-mail addresses, residential addresses, and telephone numbers in directories located on the Internet so that their friends and colleagues may contact

10 them. These directories include, by way of example, anywho.com, switchboard.com, bigfoot.com, Yahoo! People search at people.yahoo.com, and whowhere.com. The party listing their personal contact information will be known as the "listing party," and the party seeking the contact information of the listing party will be called the "querying party."

15 These web-based directories operate on a common principal—the querying party goes to the appropriate website and then enters the name of the person they are trying to search (the listing party), and the search engine finds the listing party's e-mail (or other contact information such as residential address and telephone number) and displays it to the querying party. Some of these directories ask the querying party for additional information apart from

20 the name of the listing party, such as the city and state of the listing party, or the domain name of the e-mail address of the listing party. The web-based directories serve an important function. It is of great interest to the listing party to be found by desired contacts, friends and acquaintances. It also is of interest to the querying party that these directories be complete enough so the querying party can contact that long lost high school friend or college study-

25 mate.

Being listed in a web-based directory is often as important if not more important than being listed in the phone book because it is a cost efficient mechanism for being contacted from afar. Most people do not have phone books for areas they do not live and long-distance

30 directory information is expensive. Exacerbating the problem is the fact that many querying parties do not know the particular city or even state of the person they are looking for, making the ability to perform a nationwide or international search that much more critical. In addition, of course, telephone directories provide only telephone numbers and do not have e-mail addresses or other contact information. The severe limits of telephone directories make

35 on-line directories critical for those querying parties that would like to reach their long lost friends by e-mail or any means outside of a land telephone. When these web-based directories are incomplete, two people often suffer: the people who want to be contacted and those who would like to make the contact.

40 Unfortunately, due to privacy consideration, many people refuse to list their personal contact information on databases that can be publicly accessed. These potential listing parties want to have their personal information made available to some people, but not everyone. Like the person who keeps their telephone number unlisted in published telephone directories, these people refuse to have their e-mail made available to the general public for fear of being

45 barraged by SPAM e-mails. (As used in this specification, the term "SPAM" refers to mass-mailed and unsolicited e-mails, usually (but not always) unwanted by the recipient.) They are also afraid to have their residential addresses be made available for fear of obtaining junk mail, and their telephone numbers made available for fear of receiving unsolicited and undesired telephone calls from telemarketers. Some people simply do not want their

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whereabouts or contact information made known to certain specific other parties, for an infinite variety of reasons. Like many who refuse to be listed in telephone directories, many do so for personal safety reasons. The problem with current web-based directories is that they provide no gatekeeper feature. Personal contact information is made available to
5 anybody whether or not the listing party wants to be contacted by the querying party. Once you are listed, everybody—good, bad, and indifferent—has access to the personal contact information.

The problem of unwanted contact is heightened by heavy marketing activities of commercial
10 interests seeking to expand their customer bases. These techniques are commonly referred to as "mass marketing." These efforts include mass paper mailings, telephone cold-calling, or SPAM. As the cost of making a contact decreases, the percentage of efforts that needs to be successful to justify the cost of the marketing effort decreases. Even outside the Internet context, depending on the campaign type cost, between one-percent to five-percent of
15 contacted parties need only respond to a marketing effort to justify the marketing expenses. As the profit margin on a particular item increases, the success rate of each attempted contact can decrease. What are colloquially referred to as "big ticket items" such as cars or travel can have success rates even below one percent and still be effective. The only barrier to the number of contacts is the cost of each particular contact. As the cost of each individual
20 contact increases, targeting to a likely buyer must increase to make the marketing effort economically viable. Otherwise, the cost of the marketing campaign could surpass the profits derived from it. Price, historically, has been a natural barrier to indiscriminate marketing efforts. As the cost of these methods of communication declines and the required success rate in turn declines, the prevalence of these campaigns increase. Cheaper marketing means more
25 marketing. Advertisers have less incentive to limit their marketing efforts by targeting those most likely to buy a particular good or service. Because each solicitation is so inexpensive, advertisers can afford to be indiscriminate.

The problem is especially compounded on the Internet. Since sending e-mail is practically
30 free, substantially less than one percent of all contacted parties need respond to pay for the marketing expenses associated with sending an e-mail. There is no need to target the marketing effort to groups that are more likely to be interested in a particular product or service. Consequently, spamming has become a widespread problem. People who place their e-mail information on public directories often find a plethora of unwanted e-mails cluttering
35 their day, as they turn on their computers. Not only is this annoying, but it is a waste of time, and ultimately leads to lower productivity as workers sort through e-mail that have nothing to do with their work. Since many people have a limited amount of memory and space available for e-mail, spam e-mail clutters limited amount of memory available for e-mail.
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It is little wonder why people do not want to have their e-mail address listed so that they do not fall prey to SPAM. The following is a quote from an article in "The Register" of February 2, 2001 by Tim Richardson concerning the problem of spam:

45   "Spam costs Net users a whopping E10 billion ($9.33 billion) a year, according to
the European Commission. Commenting on the findings of a European study,
Internal Market Commissioner Frits Bolkestein said: 'The exponential growth of
junk e-mail in recent years is a fact of life. Current technology allows a single
cyber-marketing company to send half a billion personalized ad mails via the

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World Wide Web every day. Consumer information gleaned from individual Web transactions/consultations can be sold for large sums of money, and yet many individual subscribers are unaware of the scale and implications of these developments.'"

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The problem is not just limited to e-mail. Unsolicited telephone calls are annoying and often come at inopportune times. Even mailed solicitations take a certain amount of time to sort through before it can be identified and dismissed as junk. As a result, many people make their personal contact information unavailable to the public. In fact, most people do not have
10 their e-mail listed in a directory.

Accordingly, most directories of personal contact information have enormous gaps in their coverage because listing parties are reluctant to list their personal information. Finding an e-mail address of most people is a near impossibility. As a result of these incomplete on-line
15 directories, people who have lost contact with a particular individual are deprived of the most efficient and inexpensive means of locating them. Querying parties with whom the listing party would like to make contact have no way of making the contact since the contact information is not made generally available in a directory. They cannot find their lost friend's e-mail, telephone number, address and other contact information. Currently, a party with
20 personal information that they are considering listing must make an ugly choice. Once choice is not publicly list their information, which of course prevents desirable querying parties (perhaps a long lost friend) from easily contacting them. The other choice is to publicly list their personal contact information so that they can be reached by those who the listing party would like to be contacted, but pay the price of a steady stream of unwanted
25 solicitous contacts by any number of undesired individuals. The problem, as mentioned earlier, is most severe for e-mail directories where there is virtually no cost associated with the contact effort. Thus, e-mail information is often kept under closer guard than other types of personal information, since it is the most likely to be abused. Ultimately, the cheapest and most effective way of contacting an old friend or acquaintance—e-mail—is the most likely to
30 be withheld by the listing party because it is most likely to be subject to abuse.

What is needed is a way to be contacted by people by whom one wants to be contacted, while not being contacted by people sought to be avoided. What is needed is a way to allow listing parties to provide personal information to querying parties with whom the listing party
35 desires to be contacted, while at the same time hiding the information from querying parties whom the listing party does not want to communicate. What is needed is a way to be contacted by that long-lost friend or that interesting fellow you met on an airplane trip and remember his name but lost his phone number, without being barraged by every peddler with a product or service because everyone has access to your personal contact information.
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Summary of the Invention

The invention is a method and apparatus for people who would like to list their information in directories (the "listing party") to distribute their personal contact information (such as their
45 personal e-mail address, telephone number, pager number, and fax number) to only those people inquiring about their personal information (the "querying party") by whom the listing party wants to be contacted. The method employs a bridge website as a directory for electronic mail addresses, telephone numbers, pager numbers, fax numbers, street addresses, and any combination thereof. In the first embodiment of the invention, the listing party

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approves or denies a request for personal contact information after the querying party who is seeking the personal contact information is identified. In a second embodiment of the invention, the listing party may opt to agree to automatic personal information disclosure if the querying party provides personal information about themselves that conforms to certain
5 pre-established parameters set by the listing party. The preferred embodiment of the invention is performed on the Internet. It is foreseeable that the invention may be practiced without the use of the Internet.

The preferred embodiment of this invention is when both the listing party and the querying
10 party use computers with modems to access the Internet, but this arrangement is not necessary in all embodiments. In the first embodiment of the invention, the querying party sends a querying signal indicating a request for the personal contact information of the listing party. After the listing party receives the request for information and responds, the querying party receives a personal contact information signal, which contains the personal contact
15 information of the listing party. The personal contact information signal only contains the personal contact information that the listing party wanted to be made available to the querying party. The listing party learns of the query by a query notification signal. Upon learning of the query, the listing party then sends a consent/no consent signal indicating what, if any information shall be transmitted to the querying party. It is entirely conceivable that
20 the querying party may generate the querying signal, or may receive the personal contact information signal, using a telephonic peripheral (such as a POTS telephone (Plain Old Telephone Service), cellular telephone, or digital phone, or Internet phone). It is entirely conceivable that the personal contact information signal may be received by using a telephonic peripheral. Likewise, the listing party may receive the query notification signal, or
25 generate the consent/no consent signal, using either a computer or telephonic peripheral, and may send the consent/no consent signal using a computer.

In the second embodiment of the invention, instead of the listing party actively screening the request for personal contact information, the listing party establishes parameters wherein to
30 furnish information. The querying party is asked to fill out a questionnaire. Based upon the querying party's response to the questionnaire and its correspondence to the established parameters, the personal contact information of the listing party will be distributed in accordance with the desires of the listing party. The listing party first establishes parameters by sending a parameter requirements signal in response to a parameters inquiry signal
35 generated by the apparatus. Having done so, the questionnaire is established. The querying party sends a querying signal to ask for personal contact information of the listing party. The querying party is to then be sent a questionnaire and given information based upon the querying party's responses. This is accomplished by sending a questionnaire signal to the querying party after the querying party sent the querying signal. The querying party then
40 sends a response to the questionnaire in the form of a questionnaire response signal. Personal contact information of the listing party is then sent the querying party by means of a personal contact information signal. The personal contact information contained in the personal contact information signal sent to the querying party is dictated by the query party's response to the questionnaire. It is entirely conceivable that the listing party may receive the parameter
45 inquiry signal or generate the parameter requirements signal using a telephonic peripheral instead of a computer, although computer is preferred. Likewise, it is entirely possible that the querying signal may be generated by the querying part using a telephonic peripheral, the questionnaire signal received by a telephonic peripheral, the questionnaire response signal

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generated by use of a telephonic peripheral, or the personal contact information signal received by a telephonic peripheral.

In most cases new listing parties would opt for the first embodiment where they choose to be
5 notified and approve or disapprove information release on a case-by-case basis. Listing parties might then choose to experiment with the questionnaire method of the second embodiment. Using the second embodiment, they will establish screening criteria to which they will screen querying parties. The listing party determines whether or not a querying party falls within the screening criteria by examining his or her response to the questionnaire.
10 As time passes, the listing party will figure out which criteria work best. Put simply, the listing party will over time know which questions best screen people trying to obtain his personal information.

As the listing party tweaks criteria and the criteria become increasingly fine-tuned, the listing
15 party will reach a point where they seem to have established a good screening criteria. Once optimal screening criteria are established, they will receive very few or no inquiries from parties to who they do not wish to release at least some contact information. At that point the listing party might feel sufficiently secure to opt for the second embodiment where contact information is released automatically if the response to the questionnaire falls into the criteria
20 established for releasing information made by the listing party.

Using this second embodiment of the invention, however, the listing party may well still have released information to a querying party that he wished he did not, or, alternatively, may have failed to send information to a querying party to whom he rather would have or to whom he
25 would have rather sent more complete information. In the event that information is given out to undesired listing parties, the listing party can resort to the standard blacklisting feature found on many related software applications. Alternatively, in the event that information was not sent out that the listing party would have preferred was, the listing party can send out this information on his own initiative. By following this gradual progression from the first to the
30 second embodiment though, the listing party stands a strong chance of never releasing contact information to a completely foreign party.

Brief Description of the Drawings
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Figure 1(a) is a figure of the website-based personal contact information inquiry system.

Figure 1(b) is a figure of the apparatus for storing the listing party's personal contact information wherein the querying signal is sent by the querying party's computer, the
40 personal contact information signal is received by the querying party's computer, the query notification signal is received by the listing party's computer, and the consent/no consent signal is generated by the listing party's computer.

Figure 2 is a figure of the website-based personal contact information inquiry signal wherein
45 the personal information is received by the querying party's telephonic peripheral, but the querying signal is still sent by means of a computer; the query notification signal is received by the listing party's computer and the consent/no consent signal is generated by the listing party's computer.

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Figure 3 is a figure of the website-based personal contact information inquiry signal wherein the querying signal is generated by a querying party's computer, the personal contact information signal is received by the querying party's computer, the query notification signal is received by a telephonic peripheral of the listing party instead of a computer, but the consent/no consent signal is still sent using a computer.

Figure 4 is a figure of the website-based personal contact information inquiry signal wherein the querying signal is generated by the querying party's computer, the personal contact information signal is received by the querying party's computer, the query notification signal is received by the listing party using the listing party's computer, and the listing party's telephonic peripheral generates the consent/no consent signal in place of a computer.

Figure 5 is a figure of the website-based personal contact information inquiry signal wherein the querying signal is generated by the querying party's computer, the personal contact information signal is received by the querying party's computer, the query notification signal is received by the listing party using a telephonic peripheral instead of a computer, and the listing party's telephonic peripheral also generates the consent/no consent signal in place of a computer.

Figure 6 is a figure of the website-based personal contact information inquiry signal wherein the querying signal is generated by the querying party's computer, the personal contact information signal is received by the querying party's telephonic peripheral, the query notification signal is received by the listing party's computer, and the listing party's telephonic peripheral generates the consent/no consent signal in place of a computer.

Figure 7 is a figure of the website-based personal contact information inquiry signal wherein the querying signal is generated by the querying party's computer, the personal contact information signal is received by the querying party's telephonic peripheral, the query notification signal is received by the listing party's telephonic peripheral, and the listing party's computer generates the consent/no consent signal.

Figure 8 is a figure of the website-based personal contact information inquiry signal wherein the querying signal is generated by the querying party's computer, the personal contact information signal is received by the querying party's telephonic peripheral, the query notification signal is received by the listing party's telephonic peripheral, and the listing party's telephonic peripheral also generates the consent/no consent signal.

Figure 9 is a figure of the website-based personal contact information inquiry signal wherein the querying signal is generated by the querying party's telephonic peripheral, the personal contact information signal is received by the querying party's computer, the query notification signal is received by the listing party's computer, and the listing party's computer also generates the consent/no consent signal.

Figure 10 is a figure of the website-based personal contact information inquiry signal wherein the querying signal is generated by the querying party's telephonic peripheral, the personal contact information signal is received by the querying party's computer, the query notification signal is received by the listing party's computer, and the listing party's telephonic peripheral generates the consent/no consent signal.

Figure 11 is a figure of the website-based personal contact information inquiry signal wherein the querying signal is generated by the querying party's telephonic peripheral, the personal contact information signal is received by the querying party's computer, the query notification signal is received by the listing party's telephonic peripheral, and the listing
5 party's computer generates the consent/no consent signal.

Figure 12 is a figure of the website-based personal contact information inquiry signal wherein the querying signal is generated by the querying party's telephonic peripheral, the personal contact information signal is received by the querying party's computer, the query
10 notification signal is received by the listing party's telephonic peripheral, and the listing party's telephonic peripheral also generates the consent/no consent signal.

Figure 13 is a figure of the website-based personal contact information inquiry signal wherein the querying signal is generated by the querying party's telephonic peripheral, the personal
15 contact information signal is received by the querying party's telephonic peripheral, the query notification signal is received by the listing party's computer, and the listing party's computer also generates the consent/no consent signal.

Figure 14 is a figure of the website-based personal contact information inquiry signal wherein
20 the querying signal is generated by the querying party's telephonic peripheral, the personal contact information signal is received by the querying party's telephonic peripheral, the query notification signal is received by the listing party's computer, and the listing party's telephonic peripheral generates the consent/no consent signal.

25 Figure 15 is a figure of the website-based personal contact information inquiry signal wherein the querying signal is generated by the querying party's telephonic peripheral, the personal contact information signal is received by the querying party's telephonic peripheral, the query notification signal is received by the listing party's telephonic peripheral, and the listing party's telephonic computer generates the consent/no consent signal.
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Figure 16 is a figure of the website-based personal contact information inquiry signal wherein the querying signal is generated by the querying party's telephonic peripheral, the personal contact information signal is received by the querying party's telephonic peripheral, the query notification signal is received by the listing party's telephonic peripheral, and the listing
35 party's telephonic peripheral also generates the consent/no consent signal.

Figure 17 shows the invention placed on the Public Telephone System and not on the Internet.

40 Figure 18 is a second embodiment of the invention wherein personal contact information of the listing party is provided to the querying party if the querying party provides certain personal information that falls within parameters set by the listing party.

45   **Detailed Description of the Preferred Embodiments of the Invention**

The invention herein described in the description and the diagrams is illustrative only of the preferred embodiment of the invention. The claims or their equivalents should not be interpreted to be limited to the preferred embodiments of the invention herein described.

Figure 1(a)

This invention, a 9 web-based personal contact information system, is shown in Figure 1(a).
5 It is comprised of a method and apparatus for connecting a 10 querying party to a 12 listing party without divulging the personal information of the 12 listing party unless voluntarily revealed by the 12 listing party. Figure 1(a) shows the most preferred embodiment of the invention. Both the 10 querying party and the 12 listing party are using computers connected to the Internet.
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The method and apparatus employs a 16 bridge website created by a 18 bridge website server which has a 17 personal contact information directory database that stores personal information. The 18 bridge website server is a server that is located on the 20 Internet. By "server" it is meant any computer, sub-component of a computer, or group of computers, or
15 any combination thereof, that possesses the capacity of maintaining a client/server environment on the Internet. Accordingly, the 18 "bridge web-site server" may be comprised of any computer, sub-component of a computer, or group of computers, or any combination thereof, that is available on the Internet.

20 The 16 bridge website has a 42 URL (universal resource locator) which is entered by the 10 querying party. The 10 querying party uses the 40 web browser and 41 modem of the 24 querying party's computer, using well-known website access methodologies. The 17 personal contact information directory database stores such information as the 26 e-mail addresses, 28 telephone numbers, 30 fax numbers, 32 pager numbers, and 34 street addresses
25 of the 12 listing party, as well as additional information as determined appropriate by the 12 listing party. The mechanism for storing such information is detailed in Figure 1(b), which is discussed infra.

In order to obtain the 12 listing party's personal contact information, the 10 querying party
30 sends a 22 querying-signal from the 24 querying party's computer to the 18 bridge website. A "querying signal" is defined as one or more signals sent in any sequence or simultaneously that embodies both a request for the personal contact information of the 12 listing party *and* embodies a communication of information about the 10 querying party, regardless of whether the querying signal is received in its original condition as sent by the querying party or is
35 otherwise transformed before it is received by the 18 bridge website server. In the preferred embodiment of the invention, the 22 querying signal follows the TCP/Internet Protocol and the 24 querying party's computer is a personal computer. The 10 querying party uses a 40 web browser and 41 modem which is located on the 24 querying party's computer, and enters the 42 URL of the 16 bridge website located on the 18 bridge website server. By the term
40 "modem," it is meant any device that allows one computer to communicate with a remote computer, whether over telephone lines, a cable or a T1 line. The 18 bridge website server has a 43 registration facility which is defined as a device capable of receiving the 10 querying party's personal information, storing it (at least temporarily but preferably permanently), and transmitting it to the 12 listing party. Web pages capable of receiving personal information
45 (such as name, address, telephone number, e-mail address or credit card) from the person visiting the website are well known in the art and are commonplace. In many instances, the 43 registration facility of the 18 bridge website server will simply store the name of the 10 querying party, but other information may be stored as well, such as the querying party's telephone number, e-mail address, or other contact information so that the 12 listing party

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may contact them directly. The information to be stored and made available to querying party is entirely up to the 12 listing party.

The 10 querying party also has the ability to control just what information will or will not be
5 made available. But, as with any relationship in life, it will be up to the 12 listing party to decide whether such information is sufficient and whether to release his or her personal contact information.

After the 22 querying signal has been received by the 18 bridge website server and the
10 information of the 10 querying party is stored in the 43 registration facility, a 44 query notification signal is sent to the 12 listing party. The 44 query notification signal is comprised of one or more signals sent in any sequence or simultaneously from the 18 bridge website server to the listing party that embodies both a notification that there has been a request for the personal contact information of the 12 listing party and also embodies a
15 communication of identifying information about the querying party, regardless as to whether the 44 querying notification signal is modified or altered along its path from the 18 bridge website server to the 12 listing party. The 46 consent/no consent signal is comprised of one or more signals sent in any sequence or simultaneously from the 12 listing party to the 18 bridge website server that embodies an instruction as to what personal information, if any, is to be
20 sent to the 10 querying party, regardless as to whether the 46 consent/no consent signal is modified or altered along its path from the 12 listing party to the 18 bridge website server. In one preferred embodiment, as shown in Figure 1(a), the 44 query notification signal is sent to the 13 listing party's computer in the form of e-mail, e-mail with a voice attachment, or a real time Internet telephone call message. The 44 query notification signal may contain a picture
25 (usually of the 10 querying party) as a means of identification or a voice sample. The 44 query notification signal reveals the fact that someone is trying to contact the 12 listing party and provides identifying personal information of the 10 querying party that was stored in the 43 registration facility of the 18 bridge website server.

30 After the 12 listing party receives the 44 query notification signal and has been appraised of the personal information of the 10 querying party, the 12 listing party may simply decide to contact the 10 querying party directly and make no further use of the 9 web-based personal contact information system. The 12 listing party may also simply elect to send a message via the 46 consent/no consent signal that there is no consent to disclosure of personal information
35 and politely inform the 10 querying party that their request for the listing party's personal contact information is denied. Of course, the 12 listing party may simply decide to not respond to the query, wherein a 46 consent/no consent is not sent. Through the passage of time, the 10 querying party will simply learn that 12 listing party does not wish to release his or her personal information. This type of approach may be especially appropriate when the
40 party seeking the information is simply an impersonal corporation attempting to compile a SPAM mailing list.

Alternatively, the 12 listing party may send a 46 consent/no-consent signal to the 18 bridge website server. The 46 consent/no-consent signal directs the 18 bridge website server as to
45 what information in the 17 personal contact information directory database is to be sent to the 10 querying party, if any information is to be sent at all. According to what information is contained in the 46 consent/no-consent signal, the personal contact information of the listing party, such as the 26 e-mail address, the 28 telephone number, 30 fax number, 32 pager, or 34 street address (or any combination thereof) of the 12 listing party is sent from the 17 personal

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contact information directory database of the 18 bridge website server to the 10 querying party in the form of a 50 personal contact information signal. The 50 personal contact information signal contains the information from the 17 personal contact information directory that the 12 listing party wanted to make available to the 10 querying party.

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In the preferred embodiment of the invention, the 50 personal contact information signal conforms to the TCP/IP protocol and is in the form of e-mail or e-mail with a voice attachment. In another embodiment of the invention, the personal contact information contained in the 50 personal contact information signal is in the form of analog telephone call
10 to a pager with a screen display, or is in the form of a voice telephone call using voice/character recognition technology, as shown in Figure 2 which will be further explained infra. Once the 10 querying party has the personal contact information of the 12 listing party, a personal contact has been made possible without having to make this personal information publicly available without screening.

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The 18 bridge website server has an attempt counter. An attempt counter is defined as any device capable of counting the number of attempts to obtain personal contact information. The 12 listing party may, but need not, program the 18 bridge website server to stop generating 44 query notification signals for 24 querying party's that have altogether been
20 denied personal contact information or who have not received the type of personal contact information requested. As seen in Figure 1(b), the 12 listing party simply sends a 102 maximum attempts signal to the 18 bridge website server. Once the 10 querying party exceeds the maximum number of permitted attempts at information, he or she will be "shutoff" meaning that the 12 listing party will receive no more 44 query notification signals
25 concerning the shutoff 10 querying party. This prevents the 12 listing party from receiving repeated nettlesome attempts at information.

Variations

30 As will be explained in some of the examples in the following figures the 22 querying signal, telephonic peripherals over the telephone system may take the place of computers on the 10 Internet. The 22 querying signal may be sent by a telephonic peripheral by the 10 querying party, the 50 personal contact information signal may be received by a telephonic peripheral of the 10 querying party, the 44 query notification received by the 12 listing party may be
35 received by a telephonic peripheral, and the 46 consent/no consent signal may be sent by a telephonic peripheral by a listing party. The term "telephonic peripheral," as used in the specifications and claims means any telephone end-user device—such as, but not limited to, a POTS telephone (Plain Old Telephone Service), cellular telephone, digital phones, faxes, pagers—that do not operate in the packet-switching environment of the Internet, but are
40 nonetheless interconnected and make use of the public telephone system as a means of communication. A "telephonic peripheral" may nonetheless interact with the Internet environment, such as a POTs telephone receiving an Internet telephone call. Thus, as to this specification, the universe of what exists on the public telephone lines is divided into either devices on the Internet (which are in a packet-switching environment) and those that are not a
45 part of the Internet, and form a part of the telephone system. An end-user device that is outside of the packet-switching environment of the Internet, even if the information being received was transported over the Internet, is a telephonic peripheral. The combination of telephonic peripherals greatly enhances the versatility of the system.

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For instance, as in Figure 8, the querying party (Sam) may request an e-mail address of a long friend (Tom). The system sends a 44 query notification signal to the listing party's cellular telephone phone equipped with a screen display (the 56 telephonic peripheral) prompting the 12 listing party (Tom) that he has received a query for personal information and further
5 providing identifying information about the caller. The message may say, ("Sam Smith from Springfield High School requests your personal information. Please hit 1 if you wish to provide him with your cellular telephone number by telephone.") Using his cellular phone, the 12 listing party sends a 46 consent/no consent signal (by hitting 1 on his cellular phone) to send his telephone number. The 18 bridge website server has a stored message which is
10 sent by means of a 50 personal contact information signal (an Internet phone call or a phone call) that is sent to the 10 querying party. The 10 querying party picks up the phone, hears a message "Tom can be reached at his cell phone at 737-459-9293," records the number, and immediately calls Tom's cellular phone and reaches him on the golf course. Or, as in Figure 5, while Tom is on the golf course, after receiving the phone call notifying him that Sam
15 seeks his personal contact information, may hear a message "Please hit 2 if you wish to e-mail Sam Smith your cellular telephone number." Then, from the golf course, Tom hits 2, and the 18 bridge website server sends Sam an e-mail to Sam's computer containing his cellular telephone number. Having Tom's cellular number, Sam calls up his long lost friend Tom at the golf course.
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The technology for taking information sent via telephonic devices to bridge servers on the Internet are well known and widely available to the public. Commonly known examples are many websites that receive fax information sent over the telephone lines, or services that provide Internet call-waiting while one is using the telephone line for Internet purposes.
25 Likewise, taking information available on a bridge server on the Internet and converting it so that it is received in the non-Internet environment is also well known, such as the common Internet telephone. An Internet telephone call is a telephone call from a computer equipped with speakers and microphone over the Internet to a server located in the recipient's area, which is then converted into an analog telephone call so that the recipient receives a regular
30 telephone call. The technology from going from the telephonic environment to the Internet and back again is well known. The ingeniousness of this invention is harnessing these technologies and creating a method creating a directory of personal contact information available to all, but wherein the listing party may be the gatekeeper.

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Figure 1(b)

Figure 1(a) shows the most preferred embodiment of the invention. Both the 10 querying party and the 12 listing party are using computers connected to the Internet. Figure 1(b)
40 shows how the 12 listing party uses their 13 computer equipped with a 52 web browser and 53 modem and which is connected to the Internet 20 to store the personal information they want made available to others. Once the 16 bridge website (which is generated by the 18 bridge website server) is accessed by the 12 listing party (by use of their 13 computer), upon the 12 listing party's hitting an icon of the 16 bridge website, the 18 bridge website server
45 generates a 58 database questionnaire signal which is sent to the 13 computer of the 12 listing party. At that point, the 12 listing party will be prompted by the 58 database questionnaire signal as to the particular information he would like to make available by the 18 Bridge Website Server. By means of the 58 database questionnaire signal, the 12 listing party will be asked their 26 e-mail address, 28 telephone number, 30 fax number, 32 pager number, and

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34 street address that they would like listed. In response to the 58 database inquiry signal, the 12 listing party supplies this information and it is sent via a 60 personal information storage signal from the 13 listing party's computer to the 18 bridge website server, where it is stored (and thereby "listed") in the 17 personal contact information directory database. The 12
5 listing party may also be asked to provide additional information as determined appropriate by the 12 listing party. For instance, the 12 listing party may decide to make available the hours that they can be located at their residence, or they may decide to provide their business telephone number, or the particular telephone number at which they can be located at during a certain period of time. They may even decide to leave messages. The type of personal
10 information that may be left is endless. For that matter the listing party may opt to include a repository of miscellaneous information that is not necessarily contact information such as credit card numbers and passwords. This miscellany could include any information at all that the listing party might have reason to selectively share with another party. The personal contact information remains in the 17 personal contact information database until the 12
15 listing party directs it to be sent to the 10 querying party (not shown in Fig. 1(b)).

Figure 2

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Figure 2 shows another embodiment of the 9 web-based personal contact information system. Note that it is essentially identical to Figure 1(a) with the difference being in how the 10 querying party receives the personal contact information of the 12 listing party. Instead of the 50 personal contact information signal being received by the 24 querying party's
25 computer as shown in Figure 1(a), the 50 personal contact information signal (which contains the personal contact information of the listing party) is sent to a 54 telephonic peripheral(s) of the querying party which may be a telephone, a telephone with a screen display, a pager or any other telephonic device. Where the information is not displayed on a screen, well-known character recognition software is utilized, which is capable of translating a word in electric
30 format to voice.

Figure 3

Figure 3 shows another embodiment of the 9 web-based personal contact information system.
35 Figure 3 is identical to Figure 1(a) with the exception that the 44 query notification signal (which notifies the listing party that someone has inquired about their personal information) is received by a 56 telephonic peripheral of the listing party such as a telephone, pager with screen display, or telephone with screen display, as opposed to the 13 listing party's computer as in Figure 1. The 44 query notification signal is composed in whole or part of a telephone
40 call simply informing the 12 listing party that there has been a query, or may read the information stored in the registration facility using character recognition software so as to apprise the 12 listing party as to the nature or identity of the 10 querying party. The telephone call may either be to a POTS (plain old telephone service) telephone, any form of wireless phone including digital, a pager, or any other peripheral device capable of receiving
45 a continuous analog telephone signal. In the embodiment where the 44 query notification signal is in the form of a telephone, the telephone call would reveal the personal information of the 10 querying party. If the telephone call is to a telephone such as a POTS telephone, or other form of wireless phone, the 18 bridge website server would have character/voice recognition software so that the personal information of the 10 querying party may be read to

the 12 listing party. If the telephone call is to a pager with a screen display, the personal information of the 10 querying party may be displayed on the screen of the pager. Once notified, the 12 listing party uses his or her 13 computer and sends a 46 consent/no consent signal so as to dictate what, if any, of their personal information will be sent, as previously
5   described in Fig. 1(a).

Figure 4

In Figure 4, the 22 query signal is sent by the 24 querying party's computer, and the 50
10 personal contact information signal is received by the 24 querying party's computer. The 44 query notification signal is received by the 13 listing party's computer. The consent/no consent signal is sent by the 56 listing party's telephonic peripheral

Figure 5
15
In Figure 5, the 56 listing party's telephonic peripheral generates the 46 consent/no consent signal itself and receives the 44 query notification signal. Thus, the 12 listing party may receive a 44 query notification signal to their cellular telephone with a screen display that serves as a 56 telephonic peripheral, and then sends a 46 consent/no consent signal in the
20 form of a DTMF signal (Touch Tone $_{TM}$) that is recognized by the 18 bridge website server.

Figure 6

Figure 6 is an embodiment where the 22 querying signal is sent using the 24 querying party's
25 computer over the 10 Internet, the 50 personal contact information signal is received by the 54 querying party's telephonic peripheral, the 44 query notification signal is received by the 13 listing party's computer over the Internet 10, and the 46 consent/no consent signal is sent by the 56 listing party's telephonic peripheral.

30   Figure 7

Figure 7 is an embodiment where the 22 querying signal is sent using the 24 querying party's computer over the 10 Internet, the 50 personal contact information signal is received by the 54 querying party's telephonic peripheral, the 44 query notification signal is received by the
35 56 listing party's telephonic peripheral, and the 46 consent/no consent signal is sent by the 13 listing party's computer.

Figure 8
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Figure 8 is an embodiment where the 22 querying signal is sent using the 24 querying party's computer over the 10 Internet, the 50 personal contact information signal is received by the 54 querying party's telephonic peripheral, the 44 query notification signal is received by the 56 listing party's telephonic peripheral, and the 46 consent/no consent signal is sent by the 56
45 listing party's telephonic peripheral.

Figure 9

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Figure 9 is substantially similar to Figure 1(a), with the exception that the querying signal is generated by the 54 querying party's telephonic peripheral. In such a format, such as calling a 411 directory, the system may ask for the querying party's e-mail address using voice recognition software, and send the personal contact information to the 24 querying party's computer. The 50 personal contact information signal is received by the 24 querying party's computer. The 44 query notification signal is received by the 13 listing party's computer, and the 46 consent/no consent signal is generated by the 13 listing party's computer.

Figure 10

Figure 10 is substantially similar to Figure 9, except that the 46 consent/no consent signal is generated by the 56 listing party's telephonic peripheral. The querying signal is generated by the 54 querying party's telephonic peripheral. The 50 personal contact information signal is received by the 24 querying party's computer. The 44 query notification signal is received by the 13 listing party's computer. Thus, the signal's being generated by the 10 querying party and the 12 listing party are generated by telephonic peripherals, whereas the information received is done so by a computer over the 10 Internet.

Figure 11

In Figure 11, the 22 querying signal is generated by the 54 querying party's telephonic peripheral. The 50 personal contact information signal is received by the 24 querying party's computer. The 44 query notification signal is received by the 56 listing party's telephonic peripheral. The 46 consent/no consent signal is generated by the 13 listing party's computer.

Figure 12

In Figure 12, the 22 querying signal is generated by the 54 querying party's telephonic peripheral. The 50 personal contact information signal is received by the 24 querying party's computer. The 44 query notification signal is received by the 56 listing party's telephonic peripheral. The 46 consent/no consent signal is generated by the 56 listing party's telephonic peripheral.

Figure 13

In Figure 13, the 22 querying signal is generated by the 54 querying party's telephonic peripheral. The 50 personal contact information signal is received by the 54 querying party's telephonic peripheral. The 44 query notification signal is received by the 13 listing party's computer. The 46 consent/no consent signal is generated by the 13 listing party's computer.

Figure 14

In Figure 14, the 22 querying signal is generated by the 54 querying party's telephonic peripheral. The 50 personal contact information signal is received by the 54 querying party's telephonic peripheral. The 44 query notification signal is received by the 13 listing party's computer. The 46 consent/no consent signal is generated by the 56 listing party's telephonic peripheral.

Figure 15

In Figure 15, the 22 querying signal is generated by the 54 querying party's telephonic
5 peripheral. The 50 personal contact information signal is received by the 54 querying party's
telephonic peripheral. The 44 query notification signal is received by the 56 listing party's
telephonic peripheral. The 46 consent/no consent signal is generated by the 13 listing party's
computer.

10   Figure 16

In Figure 16, the 22 querying signal is generated by the 54 querying party's telephonic
peripheral. The 50 personal contact information signal is received by the 54 querying party's
telephonic peripheral. The 44 query notification signal is received by the 56 listing party's
15 telephonic peripheral. The 46 consent/no consent signal is generated by the 56 listing party's
telephonic peripheral.

        Figure 17
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Figure 17 shows the invention not on the Internet. Neither the 22 querying signal, the 50
personal contact information signal, the 44 query notification signal, or the 46 consent/no
consent signal is transmitted over the 10 Internet. The 18 bridge website server located on the
Internet in the previous figures may be replaced by a 104 server located on the telephone
25 system. Information could be sent by means of voice, voice coupled with voice to character
recognition, screen displays, character to voice recognition, or a simply characters. Character
to voice and voice to character recognition technology is well known and can easily be
implemented.

30   Figure 18

In another embodiment of the invention as shown in Fig. 4, it is not necessary to contact the
12 listing party directly after the 10 querying party queries for the personal information of the
12 listing party. Instead, the 10 querying party is given or denied access to the personal
35 information depending on answers to questions (or a single question) posited to him or her by
the 18 bridge website server. The 10 querying party is asked for personal information that
was determined important by the 12 listing party. If the personal information provided by the
10 querying party falls within certain parameters established by the 12 listing party in
advance, the 18 bridge website server provides the 10 querying party with pre-specified
40 information contained within the 17 personal contact information data base. This information
is limited to what the 12 listing party intended the 10 querying party to have, based upon their
response to a 72 questionnaire stored on the 18 the bridge website server. The 72
questionnaire is comprised of one or more questions. This embodiment completely disallows
unapproved contact from the querying party.
45
For instance, the 12 listing party may allow all 10 querying parties that went to the same high
school access to their phone number, e-mail, and street address, but only provide to people
who went to the same college their phone number. The combinations of personal information
to be provided to the 10 querying party are virtually endless. The 12 listing party also has the

option of sending various messages in conjunction with or to the exclusion of providing personal contact information. Such a message may be "I will be contacting you later" or "I will be at Steve's house from 7:00 p.m. to 9:00 p.m."

5   To set up the system, a 62 parameter inquiry signal is sent from the 18 bridge website server to the 13 listing party's computer asking the 12 listing party as to what parameters are required to release certain personal contact information stored in the 17 personal contact information database to the 10 querying party. The parameter inquiry signal 62 is generated after the 12 listing party enters the 42 URL of the 18 bridge website server, accesses the 16
10   bridge website generated by the 18 bridge website server, and hits an icon (not shown) which is to be hit when the 12 listing party would like to set up the parameters for releasing his personal information. After hitting the icon, the 18 bridge website server sends the parameter inquiry signal, which will appear as a questionnaire on the screen of the 13 listing party's computer. The technology for providing an on-line questionnaire is well known in the art.
15   The 12 listing party will indicate which personal contact information stored in the 17 personal contact information database is to made available to the 10 querying party based upon the querying party's response to the 72 questionnaire.

     The 12 listing party sends a 64 parameter requirements signal to the 18 bridge website server
20   using their 13 computer equipped with a 52 Web browser and a 53 modem. The 64 parameter requirements signal establishes the parameters wherein certain, if any, personal information contained in the 17 personal contact information directory database will be sent to the 10 querying party. The 64 parameter requirements signal generated by the 12 listing party may be comprised of one or more signals sent in any sequence or simultaneously to the
25   18 bridge website server that embodies the established parameters wherein certain, if any, personal contact information contained in the 17 personal contact information directory database of the 18 bridge website server will be sent to the 24 querying party, regardless as to whether the 64 parameter requirements signal is modified or altered along its path to the 18 bridge website server from the listing party.
30

     The 12 listing party establishes parameters for being contacted, such as name, age, demographic profile, address (be it street address, zip code, or geographical area), educational history, present school, employment, employment history, club memberships, interest, religion, parish affiliations, gender, family relations, passwords, physical appearance
35   characteristics, or any systematic weighted combination thereof. In the preferred embodiment, these criteria are stored in electronic format on the 18 bridge website server in a 70 contact parameters database, which stores the parameters established by the 12 listing party for releasing personal information stored in the 17 personal contact information directory database.
40

     After the system is set up, when the 10 querying party wants to obtain the personal information of the 12 listing party, as before, they access the 18 bridge website server using a 24 computer equipped with a 40 web browser and 41 modem. The 10 querying party enters the 42 URL of the 16 bridge website into the 40 web browser software to access the 16 bridge
45   website. Unlike sending a 22 querying signal that embodies both a request for personal contact information of the listing party and identifying information of the 10 querying party, a 90 request for information signal is sent. The 90 request for information signal, unlike the 22 querying signal in the previous embodiment, may consist solely of a request for the personal information of the 12 listing party. The information about the 10 querying party will

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be procured by means of a questionnaire. Instead of 12 listing party sending a consent/no consent signal after reviewing the identity of the listing party, just what information will be sent to the 10 querying party will be determined automatically by the querying party's response to the 72 questionnaire, and further involvement by the 12 listing party is not

5 necessary. The 90 request for information signal is comprised of one or more signals sent in any sequence or simultaneously from the querying party that embodies a request for the personal contact information of the listing party, regardless as to whether the querying signal is modified or altered along its path from the querying party to the bridge website server

10 Unlike the other embodiment shown in Figure 1 wherein the 12 listing party is contacted after the 10 querying party requests the 12 listing party's personal contact information, a 72 questionnaire for the querying party is generated by the 18 bridge website server. This obviates the necessity for any further involvement by the 12 listing party, though a courtesy 44 query notification signal (not show in Fig. 4, but shown in Fig 1) may be sent to the 12

15 listing party so that he or she can monitor requests for personal information. The 72 questionnaire for the querying party is sent via a 66 questionnaire signal for the querying party, which is sent to the 24 querying party's computer from the 18 bridge website server. The 18 bridge website server stores the 72 questionnaire, ready for 90 request for information signal sent by a 10 querying party. The 66 questionnaire signal for the query party is

20 comprised of one or more signals sent in any sequence or simultaneously from the bridge website server to the 10 querying party that embodies a questionnaire for the 20 querying party, regardless as to whether the 66 questionnaire signal for the querying party is modified or altered along its path to the 24 querying party.

25 Once the 10 querying party receives the 72 questionnaire that was sent in the form of a 66 questionnaire signal, the 10 querying party electronically replies to the questionnaire, answers some or all of its questions, and generate a 68 questionnaire response signal which is transmitted to the 18 bridge website server. When the 18 bridge website server receives the 68 questionnaire response signal from the querying party it compares the information

30 provided by the responses to the 72 questionnaire to the parameters for releasing personal contact information stored in the 70 contact parameters database. Based on the parameters (or lack of parameters) provided by the 10 querying party in the form of a 68 questionnaire response signal, the 18 bridge website server then either (1) generates a 50 personal contact information signal to the querying party which provides them with the personal information

35 and/or messages the 12 listing party determined was appropriate based on the parameters (or lack of parameters) received, or (2) provides no further information in response to the parameters (or lack of parameters) received, or (3) generates a second 66 questionnaire signal for the querying party asking for additional information, whereupon the 10 querying party generates a second 68 questionnaire response signal which is again received by the 18 bridge

40 website server, and the process of the comparison of the contact parameters within the 70 contact parameters database begins again and responds in the way just described.

The 12 listing party may establish any number of responses based upon the information provided by the 10 querying party. Based upon the information provided by the 10 querying

45 party which is in the form of response to a questionnaire:

(1) the 12 listing party may approve compete disclosure of their personal contact information as stored in the 17 personal contact information directory database of the 18 bridge website server;

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(2) the 12 listing party may specify a partial disclosure of their contact information;

(3) the 12 listing party may deny any disclosure but notify the 10 querying party that they
5   will contact the 10 querying party directly;

(4) the 12 listing party may deny any disclosure of personal information and request that
the 18 bridge website server solicit more complete identification information from the
10 querying party by sending another 66 questionnaire signal for the querying party
10   which will prompt the 10 querying party for more information;

(5) the 12 listing party may deny any disclosure but send a message to the 10 querying
party;

15   (6) the 12 listing party may deny any disclosure and not respond in any way to the 10
querying party; or,

(7) if the 9 web-based personal contact information system is also equipped with a 44
query notification signal as shown in Figure 1(a), the 12 listing party may arrange that the
20   18 web bridge server not forward any further 44 query notification signals from that same
10 querying party ever or for a specified time period.

The 9 web-based personal contact information system allows the listing party to manually
screens unwanted commercial solicitations while permitting selective address disclosure to
25 desired business and personal contacts. Alternatively, the 12 listing party may opt to agree to
automatic address disclosure if the 10 querying party knows a predetermined specific piece or
pieces of personal information about them.

A 44 query notification signal as shown in Figure 1(a) (and not shown in Figure 18) may be
30 added as a supplemental feature so that the 12 listing party may be informed of the identity of
the 10 querying party that is trying to obtain their personal contact information. The 44 query
notification signal may also simply notify the 12 listing party that there has been an attempt
to obtain his or her personal contact information.

35   **The Claims**

In the following claims "the listing party" and "the querying party" are not claimed as
elements of the claims. Rather they are included as limitations of signals to indicate the
source of generation or the termination point of any given signal. It is the signal being
40 generated or received, and not the listing or querying party generating or receiving the signal
that is claimed. Likewise, the "listing party's computer" or the "querying party's computer"
is not being claimed in any of the following claims. It is the signal sent to or received by the
listing party's computer or the querying party's computer that is claimed, not the computers
themselves. As to claims that recited a signal being received by a given computer, a signal
45 that is not received by said given component falls outside the scope of the claim. The
computer *itself* however does not form an element of the claim. Rather, receipt or generation
of the signal by a computer is meant to be a limitation on the element of that particular signal.
In claims where signals are received or generated by computers having web browsers and

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modems, it is only the signal the signal that is claimed, and not the computer having a web browser and modem.

Thus, as to a "querying signal generated by a querying party," it is the querying signal *itself*
5 and not the querying party that is claimed. The "querying party" is recited to indicate the source of the signal. The limitation "generated by a querying party" serves to show that the element of a "querying signal" is limited to those querying signals that are in some way generated by a querying party. A "querying signal" not in some way generated by a querying party would fall outside the scope of the claim.
10
Also, as to the term "a query notification signal that notifies the listing party," the query notification is claimed but not the listing party. The "listing party" is present in the claim language to state where the query notification signal is directed. The limitation of "that notifies the listing party" is included to show that only those query notification signals
15 capable of notifying the listing party fall within the scope of the claim language. However, the "listing party" is not claimed as an element itself.

Likewise, as to "a personal contact information signal generated by the bridge website server sent to the querying party," the "personal contact information signal generated by the bridge
20 website" is claimed, not the querying party. However, "a personal contact information signal generated by the bridge website server" that is not somehow directly or indirectly sent to the querying party would not fall within the scope of the claims.

Likewise, as to the "consent/no consent signal from the listing party" the purpose of the
25 recitation of the "listing party" is to indicate the source of the consent/no consent signal, not to claim the listing party themselves.

Likewise, when it is said that "the querying signal is generated by a querying party's computer" it is meant that the <u>source</u> of the querying signal is the querying party's computer,
30 and querying signal from the querying party's computer is claimed, not the querying party's computer <u>itself</u>. In other words, while the signal is limited to signals from a particular source (the querying party's computer), it is the signal from a particular source that is claimed, not the source itself. (This is analogous to saying that water from the Jordon River must be used, but that the Jordon River is not itself claimed.) When it is said "the querying signal is
35 generated by the querying party's telephonic peripheral," the querying party's telephonic peripheral itself is not claimed. However, the querying signal must come from the querying party's telephonic peripheral to fall with the scope of the claims. Similarly, statements that the consent/no consent signal are generated by a computer of the listing party, or that the consent/no consent signal is generated by a telephonic peripheral of the listing party, is not to
40 claim the computer or the telephonic peripheral itself.

The same goes to statements as to destination. When it is said that "the personal contact information signal is received by the querying party's computer," the querying party's computer only indicates the <u>destination</u> of the signal, <u>and is not claimed itself</u>. Thus, personal
45 contact information signal that are not to be received by the querying party would fall outside the literal scope of the claim. However, the querying party's computer is never claimed. Likewise, when it is said "the personal contact information signal is received by the querying party's telephonic peripheral," the telephonic peripheral is not claimed per se, rather, it only serves to indicate the destination of the personal contact information signal. (This is

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